

TOP SECRET

OUT 62423

P 270359Z  
FM NPIC

1967 JUN 27 04 53Z

25X1

AFSSO PACAF  
AFSSO ACIC  
AFSSO FTD  
AFSSO USAF  
CNO  
OPCEN

TOP SECRET

CITE NPIC 1084.

SUBJECT: CAMERA INFORMATION FOR MISSION 1042-1

1. THE MISSION UTILIZED TWO PAN CAMERAS, FOUR HORIZON CAMERAS,  
A STELLAR CAMERA, AND AN INDEX CAMERA.

## 2. CAMERA DATA

A. MAIN UNITS	FORWARD	AFT	STAR HOR	PORT HOR
FOCAL LENGTHS(MM)	609.628	609.628	FWD 55.000	FWD 55.000
			AFT 55.000	AFT 55.000

FILTER (WRITTEN NR)	23A	21	25	25
APERTURE	F3.5	F3.5	F8.0	F6.3
SLIT WIDTH(IN)	.200	.150		
EXPOSURE (SEC)	1/100	1/100		
FILM	3404	3404	3404	3404
RESOLUTION (L/MM)	205	205	NA	NA

B. S/I UNITS	STELLAR	INDEX
FOCAL LENGTH(MM) PART 1	83.9121	38.3364
PART 2	83.7230	38.2628
FILTER (WRITTEN NR)	NONE	21
APERTURE	F1.8	F4.5
EXPOSURE (SEC)	1.0	1/500
FILM	3401	3400
RESOLUTION (L/MM) PART 1		74

DISTRIBUTION 7		
Cy No.	Office	Action
1	File	
	OS	
	SEC BR	
	TDS	25X1
	CSD	
	IPD	25X1
	PD	
	PSD	
	PLB-ICB	
	TID	
	IAD	
	PAG	
	DIAXX-4	
	SPAD	
	NSA-LO	
	D.A-AP	

Advance copy  
Sanitized

Declass Review by NGA

TOP SECRET

25X1

GROUP 1  
Excluded from automatic  
downgrading and  
declassification

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## PART 2

71

## UNIT NUMBER

PART 1 D97/120/117

PART 2 D98/121/118

## 3. LENS DISTORTION (PIN CUSHION) MM

A. MAIN UNITS	3	2	1	0	359	358	357
FWD UNIT	.002	.001	.0	.0	.0	.002	.003
AFT UNIT	.003	.001	.0	.0	.0	.002	.003

## B. HORIZON CAMERAS (MM) FWD AFT

	PORT	STAR	PORT	STAR
(RADIAL) 10 DEGREES	.020	.020	.010	.010
20 DEGREES	.060	.060	.040	.030
(TANGENTIAL) MAX VECTOR	.015		.030	.015 .020

## 4. CAMERA ANGLES DEG. MIN.

A. ANGLE BETWEEN PAN CAMERAS 29 50.29

## B. DEPRESSION ANGLE BETWEEN

HORIZON AND PAN CAMERAS	FWD STAR	13	55.7
	FWD PORT	15	12.0
	AFT STAR	15	59.0
	AFT PORT	15	52.9

## C. ANGLE BETWEEN STELLAR

AND INDEX CAMERAS PART 1 89 58.0

## 5. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200  
CYCLES PER SECOND.

6. IMAGE MOTION COMPENSATION DATA (CYCLE RATE (CPS), GROUND  
ANGULAR VELOCITY (GAV), AND PASSES WHERE USED).

REF. LEVEL	AMPL. LEVEL			PASSES
NO. CPS.	GAV.	NO. CPS.	GAV.	
6 .3468	.0314	5 .0857	.0077	1D AND 4D
6 .3468	.0314	4 .0986	.0089	5D THRU 11D
6 .3468	.0314	3 .1110	.0100	13D THRU 87D

## 7. PROGRAM TIME DATA

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CAMERA ON TIME					PROGRAM ON TIME		PROGRAM
PASS	(ZULU TIME)				UP RAMP		DURATION
	DAY	HR	MIN	SEC	SEC		SEC
1D	16	23	04	32	1330		38
4D	17	03	31	42	1146		88
5D	17	05	04	53	1293		55
6D1	17	06	38	07	1492		35
6D2	17	06	42	44	1768		222
7D	17	08	06	01	1361		99
8D	17	09	32	38	1159		125
9A	17	10	43	42	47		47
9D1	17	11	03	46	1251		23
9D2	17	11	05	03	1329		26
9D3	17	11	09	45	1611		138
9D4	17	11	18	13	2119		74
10D	17	12	41	29	1694		27
11D	17	14	11	46	1713		22
13D	17	17	19	23	2174		226
14D	17	18	39	17	1571		62
16D1	17	21	29	43	1004		27
16D2	17	21	39	14	1575		28
21D	18	05	07	58	1512		111
22D	18	06	43	00	1818		56
23D1	18	08	03	27	1250		77
23D2	18	08	06	57	1460		100
24D	18	09	33	03	1230		44
25D1	18	11	03	40	1271		127
25D2	18	11	10	44	1695		152
26D	18	12	43	23	1859		39
29D	18	17	20	52	2322		102

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30D1	18	18	40	00	1674	31
30D2	18	18	58	55	2809	123
36D	19	03	34	59	1437	102
37D1	19	05	02	13	1227	79
37D2	19	05	03	58	1332	117
37D3	19	05	07	17	1531	101
38D	19	06	31	56	1214	78
39D	19	08	05	17	1436	284
40D	19	09	32	13	1283	76
41D	19	11	10	04	1736	80
45D	19	17	19	21	2316	259
48D	19	21	39	34	1748	37
52D	20	03	31	42	1306	28
53D1	20	05	04	04	1455	95
53D2	20	05	07	06	1637	36
53D3	20	05	23	16	2607	113
55D1	20	08	00	35	1261	107
55D2	20	08	05	58	1584	213
56D	20	09	29	21	1194	144
57D1	20	11	02	20	1381	187
57D2	20	11	09	17	1798	61
57D3	20	11	19	00	2381	173
58D	20	12	40	16	1864	122
59D	20	14	10	55	1912	56
63D	20	20	08	15	1786	23
68D	21	03	30	18	1353	35
69D1	21	05	03	01	1525	25
69D2	21	05	04	52	1636	56
69D3	21	05	22	12	2676	97
70D	21	06	31	51	1465	49

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71D1	21	07	59	39	1313	68
71D2	21	08	04	36	1610	132
71D3	21	08	08	25	1839	78
72D1	21	09	27	52	1247	230
72D2	21	09	32	28	1523	82
73D	21	11	02	43	1546	75
74D1	21	12	37	21	1835	38
74D2	21	12	38	40	1915	65
77D	21	17	16	06	2391	232
79D	21	20	04	26	1714	23
84D	22	03	27	22	1343	187
85D	22	05	00	34	1546	77
86D1	22	06	30	15	1538	73
86D2	22	06	32	43	1686	75
87D1	22	07	56	12	1307	157
87D2	22	08	00	30	1565	82
87D3	22	08	02	49	1703	33

NOTE: ABOVE DATA APPLIES TO FWD UNIT ONLY. ADD 12 SECONDS  
TO OBTAIN START TIMES OF AFT UNIT.

#### 8. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
8	470276.367	33040.7505	----
16	515122.526	77886.9188	.009
24	19766.481	33001.7945	.010
32	64636.025	77871.3483	.010
40	106105.231	32940.5637	.009
48	150988.270	77823.6130	.010
56	192418.117	32853.4699	.010
63	231940.148	72375.5105	.010
73	284619.026	38654.4017	.013

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74 318190.727 72226.1113 .009

88 365130.512 32765.9087 .012

NOTE: ALL "DIFFERENCE" VALUES ARE MINUS.

GP-1

T O P S E C R E T

-END OF MESSAGE-

S/C NOTE:

25X1

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